



CO L O R A D O

**Department of Health Care
Policy & Financing**

Health First Colorado
Community Mental Health Services Program

Fiscal Year 2017–2018 PIP Validation Report
**Improving the Rate of Completed Behavioral
Health Services Within 30 Days After Jail
Release**
for
Colorado Health Partnerships, LLC

April 2018
For Validation Year 4

*This report was produced by Health Services Advisory Group, Inc. for the
Colorado Department of Health Care Policy & Financing.*



Table of Contents

1. Background	1-1
PIP Rationale.....	1-2
PIP Summary.....	1-2
Validation Overview	1-3
2. Findings	2-1
Validation Findings	2-1
Design.....	2-3
Implementation.....	2-3
Outcomes.....	2-3
Analysis of Results.....	2-3
Barriers/Interventions	2-4
3. Conclusions and Recommendations.....	3-1
Conclusions	3-1
Recommendations	3-1



Acknowledgements and Copyrights

HEDIS[®] refers to the Healthcare Effectiveness Data and Information Set and is a registered trademark of the National Committee for Quality Assurance (NCQA).

1. Background

The Balanced Budget Act of 1997 (BBA), Public Law 105-33, requires that states conduct an annual evaluation of their managed care organizations (MCOs) and prepaid inpatient health plans (PIHPs) to determine the MCOs' and PIHPs' compliance with federal regulations and quality improvement standards. According to the BBA, the quality of health care delivered to Medicaid members in MCOs and PIHPs must be tracked, analyzed, and reported annually. The Colorado Department of Health Care Policy & Financing (the Department) has contractual requirements with each MCO and behavioral health organization (BHO) to conduct and submit performance improvement projects (PIPs) annually.

As one of the mandatory external quality review activities under the BBA, the Department is required to validate the PIPs. To meet this validation requirement, the Department contracted with Health Services Advisory Group, Inc. (HSAG), as the external quality review organization. The primary objective of the PIP validation is to determine compliance with requirements set forth in the Code of Federal Regulations (CFR) at 42 CFR §438.330(d), including:

- Measurement of performance using objective quality indicators.
- Implementation of system interventions to achieve improvement in quality.
- Evaluation of the effectiveness of the interventions.
- Planning and initiation of activities to increase or sustain improvement.

In its PIP evaluation and validation, HSAG used the Department of Health and Human Services, Centers for Medicare & Medicaid Services (CMS) publication, *EQR Protocol 3: Validating Performance Improvement Projects (PIPs): A Mandatory Protocol for External Quality Review (EQR)*, Version 2.0, September 2012.¹⁻¹

HSAG evaluates the following components of the quality improvement process:

1. The technical structure of the PIPs to ensure the BHO designed, conducted, and reported PIPs using sound methodology consistent with the CMS protocol for conducting PIPs. HSAG's review determined whether a PIP could reliably measure outcomes. Successful execution of this component ensures that reported PIP results are accurate and capable of measuring real and sustained improvement.
2. The outcomes of the PIPs. Once designed, a PIP's effectiveness in improving outcomes depends on the systematic identification of barriers and the subsequent development of relevant interventions. Evaluation of each PIP's outcomes determined whether the BHO improved its rates through the implementation of effective processes (i.e., barrier analyses, intervention design, and evaluation of

¹⁻¹ Department of Health and Human Services, Centers for Medicare & Medicaid Services. *EQR Protocol 3: Validating Performance Improvement Projects (PIPs): A Mandatory Protocol for External Quality Review (EQR)*, Version 2.0, September 2012. Available at: <https://www.medicare.gov/medicaid/quality-of-care/medicaid-managed-care/external-quality-review/index.html>. Accessed on: Jul 18, 2017.

results) and, through these processes, achieved statistically significant improvement over the baseline rate. Once statistically significant improvement is achieved across all study indicators, HSAG evaluates whether the BHO was successful in sustaining the improvement. The goal of HSAG’s PIP validation is to ensure that the Department and key stakeholders can have confidence that reported improvement in study indicator outcomes is supported by statistically significant change and the BHO’s improvement strategies.

PIP Rationale

The purpose of a PIP is to achieve, through ongoing measurements and interventions, significant improvement sustained over time in clinical or nonclinical areas.

For fiscal year (FY) 2017–2018, **Colorado Health Partnerships, LLC (CHP)** continued its *Improving the Rate of Completed Behavioral Health Services Within 30 Days After Jail Release* PIP. The topic selected addressed CMS’ requirements related to quality outcomes—specifically, the timeliness of, and access to, care and services.

PIP Summary

For the FY 2017–2018 validation cycle, the PIP received an overall validation score of 86 percent and a *Not Met* validation status. The focus of the PIP is to improve the percentage of members released from jail, with an identified behavioral health issue, who attend a behavioral health appointment within 30 days of release. The PIP had one study question that **CHP** stated: “Do targeted interventions increase the prevalence of completed post-jail behavioral health services after inmate release for Medicaid members identified as having behavioral health needs?” The following table describes the study indicator for this PIP.

Table 1–1—Study Indicator

PIP Topic	Study Indicator
<i>Improving the Rate of Completed Behavioral Health Services Within 30 Days After Jail Release</i>	The percentage of jail-to-community releases from selected jails for eligible members, with an identified behavioral health issue, that are followed by a covered outpatient behavioral health service within 30 days of release.

Validation Overview

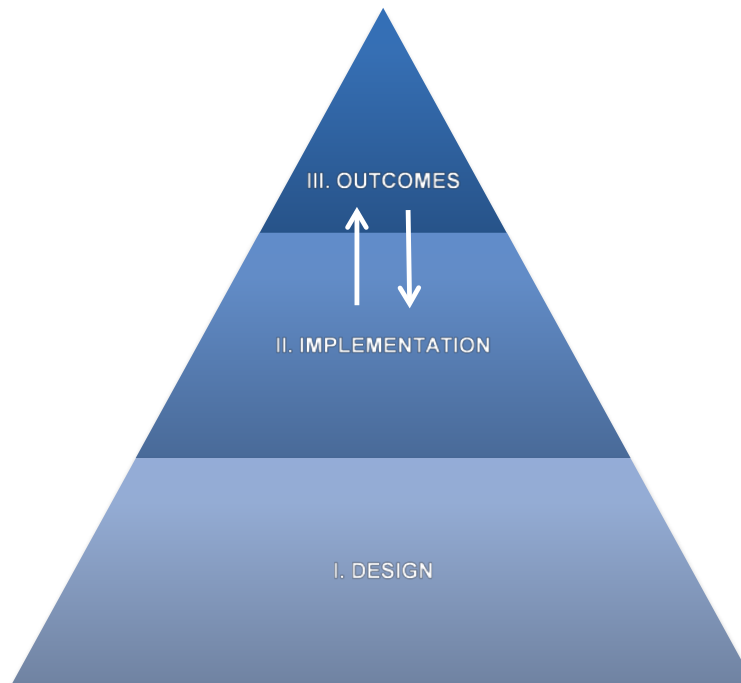
HSAG obtained the information needed to conduct the PIP validation from **CHP**'s PIP Summary Form. This form provided detailed information about the BHO's PIP related to the activities completed and HSAG evaluated for the FY 2017–2018 validation cycle.

Each required activity was evaluated on one or more elements that form a valid PIP. The HSAG PIP Review Team scored each evaluation element within a given activity as *Met*, *Partially Met*, *Not Met*, *Not Applicable*, or *Not Assessed (NA)*. HSAG designated some of the evaluation elements pivotal to the PIP process as critical elements. For a PIP to produce valid and reliable results, all critical elements had to be *Met*. Given the importance of critical elements to the scoring methodology, any critical element that received a *Not Met* score resulted in an overall validation rating for the PIP of *Not Met*. A BHO would be given a *Partially Met* score if 60 percent to 79 percent of all evaluation elements were *Met* or one or more critical elements were *Partially Met*. HSAG provided a *Point of Clarification* when enhanced documentation would have demonstrated a stronger understanding and application of the PIP activities and evaluation elements.

In addition to the validation status (e.g., *Met*), HSAG gave each PIP an overall percentage score for all evaluation elements (including critical elements). HSAG calculated the overall percentage score by dividing the total number of elements scored as *Met* by the total number of elements scored as *Met*, *Partially Met*, and *Not Met*. HSAG also calculated a critical element percentage score by dividing the total number of critical elements scored as *Met* by the sum of the critical elements scored as *Met*, *Partially Met*, and *Not Met*.

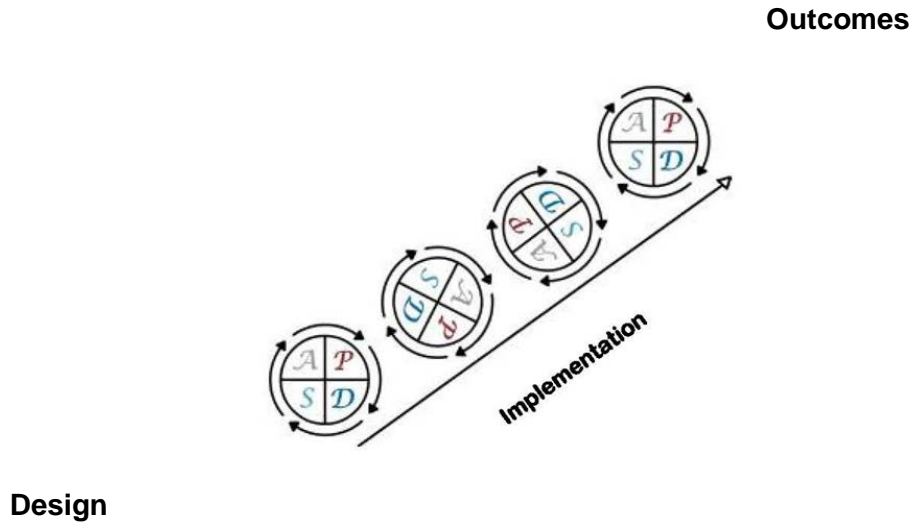
Figure 1–1 illustrates the three study stages of the PIP process—i.e., Design, Implementation, and Outcomes. Each sequential stage provides the foundation for the next stage. The Design stage establishes the methodological framework for the PIP. The activities in this section include development of the study topic, question, indicators, population, sampling, and data collection. To implement successful improvement strategies, a strong study design is necessary.

Figure 1-1—PIP Stages



Once **CHP** establishes its study design, the PIP process moves into the Implementation stage. This stage includes data analysis and interventions. During this stage, the BHOs analyze data, identify barriers to performance, and develop interventions targeted to improve outcomes. The BHOs should incorporate a continuous or rapid cycle improvement model such as the Plan-Do-Study-Act (PDSA) to determine the effectiveness of the implemented interventions. The implementation of effective improvement strategies is necessary to improve PIP outcomes.

Figure 1–2—PIP Stages Incorporating the PDSA Cycle



The PDSA cycle includes the following actions:

- **Plan**—conduct barrier analyses; prioritize barriers; develop targeted intervention(s) to address barriers; and develop an intervention evaluation plan for each intervention
- **Do**—implement intervention; track and monitor the intervention; and record the data
- **Study**—analyze the data; compare results; and evaluate the intervention’s effectiveness
- **Act**—based on the evaluation results, standardize, modify, or discontinue the intervention

The final stage is Outcomes, which involves the evaluation of real and sustained improvement based on reported results and statistical testing. Sustained improvement is achieved when outcomes exhibit statistical improvement over time and multiple measurements. This stage is the culmination of the previous two stages. The BHO should regularly evaluate interventions to ensure they are having the desired effect. A concurrent review of the data is encouraged. If the BHO’s evaluation of the interventions, and/or review of the data, indicates that the interventions are not having the desired effect, the BHO should revisit its causal/barrier analysis process; verify the proper barriers are being addressed; and discontinue, revise, or implement new interventions as needed. This cyclical process should be used throughout the duration of the PIP and revisited as often as needed.

2. Findings

This year, the PIP validation process evaluated the technical methods of the PIP (i.e., the study design), as well as the implementation of quality improvement activities, and the PIP outcomes at the first annual remeasurement. Based on its review, HSAG determined the overall methodological validity of the PIP and evaluated whether there was statistically significant improvement in the study indicator outcomes.

Table 2–1 summarizes the PIP validated during the review period with an overall validation status of *Met*, *Partially Met*, or *Not Met*. In addition, Table 2–1 displays the percentage score of evaluation elements that received a *Met* score, as well as the percentage score of critical elements that received a *Met* score. Critical elements are those within the validation tool that HSAG has identified as essential for producing a valid and reliable PIP. All critical elements must receive a *Met* score for a PIP to receive an overall *Met* validation status. A resubmission is a BHO’s update of a previously submitted PIP with modified/additional documentation.

BHOs have the opportunity to resubmit the PIP after HSAG’s initial validation to address any deficiencies identified. The PIP received a *Met* score for 67 percent of applicable evaluation elements and a *Not Met* overall validation status when originally submitted. The BHO had the opportunity to receive technical assistance, incorporate HSAG’s recommendations, and resubmit the PIP. After resubmission, the PIP received a *Met* score for 86 percent of the evaluation elements, and the overall validation status remained *Not Met*.

Table 2–1—FY 2017–2018 Performance Improvement Project Validation for Colorado Health Partnerships, LLC

Name of Project	Type of Annual Review ¹	Percentage Score of Evaluation Elements <i>Met</i> ²	Percentage Score of Critical Elements <i>Met</i> ³	Overall Validation Status ⁴
<i>Improving the Rate of Completed Behavioral Health Services Within 30 Days After Jail Release</i>	Submission	67%	73%	<i>Not Met</i>
	Resubmission	86%	82%	<i>Not Met</i>

¹ **Type of Review**—Designates the PIP review as an annual submission, or resubmission. A resubmission means the BHO was required to resubmit the PIP with updated documentation because it did not meet HSAG’s validation criteria to receive an overall *Met* validation status.

² **Percentage Score of Evaluation Elements *Met***—The percentage score is calculated by dividing the total elements *Met* (critical and non-critical) by the sum of the total elements of all categories (*Met*, *Partially Met*, and *Not Met*).

³ **Percentage Score of Critical Elements *Met***—The percentage score of critical elements *Met* is calculated by dividing the total critical elements *Met* by the sum of the critical elements *Met*, *Partially Met*, and *Not Met*.

⁴ **Overall Validation Status**—Populated from the PIP Validation Tool and based on the percentage scores.

Validation Findings

Table 2–2 displays the validation results for the **CHP** PIP validated during FY 2017–2018. This table illustrates the BHO’s overall application of the PIP process and achieved success in implementing the

studies. Each activity is composed of individual evaluation elements scored as *Met*, *Partially Met*, or *Not Met*. Elements receiving a *Met* score have satisfied the necessary technical requirements for a specific element. The validation results presented in Table 2–2 show the percentage of applicable evaluation elements that received each score by activity. Additionally, HSAG calculated a score for each stage and an overall score across all activities. This was the fourth validation year for the PIP, with the BHO completing Activities I through IX.

Table 2–2—Performance Improvement Project Validation Results for Colorado Health Partnerships, LLC

Stage	Activity		Percentage of Applicable Elements*		
			<i>Met</i>	<i>Partially Met</i>	<i>Not Met</i>
Design	I.	Appropriate Study Topic	100% (2/2)	0% (0/2)	0% (0/2)
	II.	Clearly Defined, Answerable Study Question(s)	100% (1/1)	0% (0/1)	0% (0/1)
	III.	Correctly Identified Study Population	100% (1/1)	0% (0/1)	0% (0/1)
	IV.	Clearly Defined Study Indicator(s)	100% (2/2)	0% (0/2)	0% (0/2)
	V.	Valid Sampling Techniques (if sampling was used)	<i>Not Applicable</i>	<i>Not Applicable</i>	<i>Not Applicable</i>
	VI.	Accurate/Complete Data Collection	100% (3/3)	0% (0/3)	0% (0/3)
Design Total			100% (9/9)	0% (0/9)	0% (0/9)
Implementation	VII.	Sufficient Data Analysis and Interpretation	33% (1/3)	67% (2/3)	0% (0/3)
	VIII.	Appropriate Improvement Strategies	100% (6/6)	0% (0/6)	0% (0/6)
Implementation Total			78% (7/9)	22% (2/9)	0% (0/9)
Outcomes	IX.	Real Improvement Achieved	67% (2/3)	0% (0/3)	33% (1/3)
	X.	Sustained Improvement Achieved	<i>Not Assessed</i>	<i>Not Assessed</i>	<i>Not Assessed</i>
Outcomes Total			67% (2/3)	0% (0/3)	33% (1/3)
Percentage Score of Applicable Evaluation Elements <i>Met</i>			86% (18/21)	10% (2/21)	5% (1/21)

* Percentage totals may not equal 100 due to rounding.



Overall, 86 percent of all applicable evaluation elements validated received a score of *Met*. For this year's submission, the Design stage (Activities I through VI), the Implementation stage (Activities VII through VIII), and Activity IX of the Outcomes stage were validated.

Design

CHP designed a scientifically sound project supported by key research principles. The technical design of the PIP was sufficient to measure outcomes, allowing for successful progression to the next stage of the PIP process.

Implementation

CHP accurately reported Remeasurement 2 study indicator results for this year's validation. While the BHO correctly reported the Remeasurement 2 rate, HSAG was unable to replicate the *p* values reported for the statistical comparison of the remeasurement rates to the baseline rate. The BHO used appropriate quality improvement tools to conduct its causal/barrier analysis, prioritized barriers, and developed interventions with the potential to have a positive impact on the study indicator outcomes. For the Remeasurement 2 period, the BHO documented evaluations of effectiveness for each intervention and reported next steps for each intervention based on the evaluation results.

Outcomes

For this year's PIP validation, the **CHP** PIP was evaluated for improvement of study indicator outcomes from baseline to Remeasurement 2. The study indicator rate declined from baseline to Remeasurement 2; therefore, statistically significant improvement was not achieved.

Analysis of Results

Table 2–3 displays baseline, Remeasurement 1, and Remeasurement 2 data for **CHP's** *Improving the Rate of Completed Behavioral Health Services Within 30 Days After Jail Release* PIP. **CHP's** goal is to increase the percentage of jail-to-community releases for eligible members, with an identified behavioral health issue, that are followed by a covered outpatient behavioral health service within 30 days of release.

**Table 2–3—Performance Improvement Project Outcomes
for Colorado Health Partnerships, LLC**

PIP Study Indicator	Baseline Period (1/1/2014–12/31/2014)	Remeasurement 1 (1/1/2015–12/31/2015)	Remeasurement 2 (1/1/2016–12/31/2016)	Sustained Improvement
The percentage of jail-to-community releases from selected jails for eligible members, with an identified behavioral health issue, that are followed by a covered outpatient behavioral health service within 30 days of release.	22.6%	17.4%	22.3%	<i>Not Assessed</i>

In the Remeasurement 1 PIP submission, **CHP** reported an updated baseline study indicator result, based on additional information obtained from newly participating counties. The updated baseline rate of jail-to-community releases for eligible members, with an identified behavioral health issue, that were followed by a covered outpatient behavioral health service within 30 days of release was 22.6 percent.

The Remeasurement 1 rate of jail-to-community releases for eligible members, with an identified behavioral health issue, that were followed by a covered outpatient behavioral health service within 30 days of release was 17.4 percent. The Remeasurement 1 rate declined 5.2 percentage points from the baseline rate. The Remeasurement 1 goal of 19.2 percent was not met.

The Remeasurement 2 rate of jail-to-community releases for eligible members, with an identified behavioral health issue, that were followed by a covered outpatient behavioral health service within 30 days of release was 22.3 percent. The Remeasurement 2 rate represented a decline of 0.3 percentage point from the baseline rate; however, the goal of 19.2 percent was met.

Barriers/Interventions

The identification of barriers through causal barrier analysis and the subsequent selection of appropriate interventions to address these barriers are necessary steps to improve outcomes. The BHO’s choice of interventions, combination of intervention types, and sequence of implementing the interventions are essential to overall success in improving PIP outcomes.

For the *Improving the Rate of Completed Behavioral Health Services Within 30 Days After Jail Release* PIP, **CHP** identified the following barriers to a successful jail-to-community transition of care:

- Communication challenges between the BHO, the jails, and providers.



- Difficulty obtaining data from both jails and providers.
- Limited jail and community mental health center (CMHC) resources to engage members in seeking appropriate behavioral health care.
- Lack of knowledge among behavioral health provider staff members regarding how to access timely jail release data to facilitate scheduling of the behavioral health appointment for newly released members.

To address these barriers, **CHP** implemented the following interventions:

- Provided training and technical assistance to behavioral health facility staff members on the process and tools for obtaining data necessary to identify members being released from jail in need of follow-up behavioral health services.
- Held monthly PIP task force meetings with behavioral health facility staff members to promote the shared goal of the PIP (identifying newly released members in need of behavioral health services) and facilitate ongoing monitoring of progress toward meeting the goal for all eligible members.

3. Conclusions and Recommendations

Conclusions

CHP designed and implemented a methodologically sound project. The BHO reported baseline through Remeasurement 2 study indicator results for this year's validation, completed a causal/barrier analysis, and implemented timely and active interventions. **CHP** evaluated interventions and used the intervention evaluation results to guide next steps for improvement strategies. The BHO documented some challenges related to the PIP topic that impacted the ability to achieve improvement in the study indicator outcomes. The PIP encountered substantial obstacles and unanticipated delays in obtaining the data necessary to identify members who were eligible for the PIP. **CHP** reported that before it could actively work on improving the behavioral health service follow-up rate for members released from jail, data access issues needed to be addressed. Because the State of Colorado does not have a central data repository for jail booking activity, the BHO had to obtain a business associate agreement (BAA) with each of the 42 participating counties in order to be compliant with the Health Insurance Portability and Accountability Act of 1996 (HIPAA) when accessing health data from the county jails. The delays in getting comprehensive data access for the PIP limited the BHO's ability to monitor progress toward the goal during the first remeasurement period. Now that many of the data access barriers have been addressed, the BHO is monitoring the PIP's progress monthly with key stakeholders and has established a shared goal for improvement.

Recommendations

HSAG recommends the following:

- **CHP** should conduct methodologically sound analyses of study indicator outcomes and accurately report all results.
- **CHP** should consider using a different approach to causal/barrier analysis, such as process mapping, to uncover previously unidentified barriers that may be inhibiting the improvement of study indicator outcomes.
- **CHP** should continue to evaluate each intervention for effectiveness and use intervention-specific evaluation results to guide decisions about future improvement strategies.